REC'D APR 20 1926 BOILER SHOP DEPT.

Lima Locomotive Works Incorporated

LIMA, OHIO, U. S. A.

FILE

Locomotive Tender

Southern Railway.

CARD INDEX

1089

Class 8 WHEEL 8000 GAL. Dept. SCHEDULE.

	ORDER No.	SHOP NUMBERS	DATE	DRAUGHTSMAN
SOU. RY.	C.O. 1089	7077—7088	4-20-1926	ALLISON
C.N.O.&T.P.	"	7089—7094	" 19 "	"
A.G.S.	"	7095—7098	" 19 "	"
			19	
			19	

FORM LED 32

1089- SOU. RY.

11
15
17
35
49
53
54
57
59
61
62
63
64
66
71
73
76
80
82
84
85
86
87
88
89
90
95
97
98
99

Index to Classification of Drawings

11 Axles
15 Bolts and Nuts—Studs, Pins and Bushings
17 Boxes, Truck—and Details.
Chafing Plate—See 86.
Clearances—See 98.
Coal Pusher—See 88.
Coupler—See 86.
35 Die Work—Flanging Dies.
Drawgear, Tender—See 86.
Fire Extinguisher—See 64.
49 Gauges, Templates and Jigs.
53 Handrail and Steps—Handles.
54 Headlights and Signal Attachments, Lamps, Electric Wiring, Builders' License and Number Plates.
Keys—See 15.
57 Lagging and Jacket.
Lamps—See 54.
Number Plates—See 54.
59 Oil and Grease Cups—Lubrication.
Oil Burning Attachments—See 82 and 88.
61 Painting, Lettering and Numbering—Photos.
62 Pilot and Snow Plows.
63 Pipe Fittings and Clamps—Air, Steam, Water and Lubricator Pipe Fittings.
64 Piping Arrangements.
66 Plugs, Handholes and Washout.
71 Running Boards and Brackets.
73 Sand Box, Sanders and Rigging.
Signal Attachments—See 54.
Sprinkler—See 64.
76 Springs.
80 Stoker and Details.
Steam Heat—See 64.
Steps—See 53.
82 Tank Valves—Oil and Water, Handles, Well, Goose Neck, Strainer, Hose and Cooler Cocks.
84 Tender Brake—Truck and Frame Brake.
85 Tender Frames—Front and Back Bumpers.
86 Tender Drawgear—Buffer, Chafing Plate, Coupler and Rigging, Drawhead F. and B.
87 Tender Deck, Tool Box, Water Cooler.
88 Tender Tank—Water and Oil, Coal Gate, Coal Pusher, Filling Hole and Tank Funnel.
89 Tender Truck, Bolster and Guides, Spring Seats and Plank.
90 Tender Water Scoop—Arrangements and Details.
Tires—See 95.
Tool Boxes—See 87.
95 Wheels and Tires.
97 Preliminary Designs and Propositions.
98 Clearances and Wheel Base Diagrams.
99 Miscellaneous.

ADDITIONS AND CHANGES

ADDITIONS TO BE MADE IN BLACK INK AND CHANGES IN RED INK

DATE	~~Date~~ SERIAL	PAGE	ITEMS	Check	Date	ITEMS	Check
5/1	4227	8	35	W K			
"	"	9	51	W K			
"	"	10	47-48-49-50-51	W K			
"	4228	11	1-2-3-4-5	W K			
"	4229	10	52-54-57-58-60-61	W K			
"	4230	3	31-46-47-48	W J K			
5/17	4272	10	1-22-23-30-35-36	W J K			
"	4273	8	51-52-54-56-60	W J K			
"	"	9	13-17	W J K			
"	"	5	38	W J K			
5/28	4325	5	28-29-32-33-51	W J K			
"	"	4	8	W J K			
"	"	10	26	W J K			
5/28	4326	11	41-42-43-44	W J K			
5/29	4334	11	44	W J K			
6/3	4416	10	60-61	W J K			
6/15	4525	11	44	W K			

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 11—AXLES								
	1	Axle	(1) 4	112-C-8	ORD	—	—	—	—	—
	2	"								
	3	" Marking								
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13	**GROUP 15—BOLTS AND NUTS**								
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21									
	22									
	23									
	24									
	25	**GROUP 17—BOXES, TRUCK**								
	26	Box + LID	(1) 8	T.H. SYMINGTON PRINT 2449. C. ORD.		—	—	—	—	—
	27	" Lid	—							
	28	" " Pin	—							
	29	" " Spring	—							
	30	" Journal Brass 6"x11"	(1) 8	FURNISHED BY R.R. CO.		—	—	—	—	—
	31	" " Wedge 6"x11"	(1) 8	A.R.A. DROP FORGED ORD		—	—	—	—	—
	32	" Dust Guard 6"x11"	(1) 8	HARRISON TYPE MADE BY THORNBURG ORD		—	—	—	—	—
	33									
	34									
	35									
	36									
	37									
	38									
	39									
	40									
	41									
	42									
	43									
	44									
	45	**GROUP 35—DIE WORK**								
	46									
	47									
	48									
	49									
	50									
	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 49—GAUGES, TEMPLATES & JIGS								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21	**GROUP 53—HANDRAIL AND STEPS**								
	22	Handrail								
	23	"								
	24	" Column								
	25	" "								
	26	" "								
	27	" Ball								
	28	" Flange								
	29	" "								
	30									
	31	Bumper Handle	(7) 1	863A68		✓ 53B221				
	32	" "								
	33	Tank " FRONT	R L 1 1	532-R-208	—	✓ 532-R-208	(4) —	—	—	—
	34	" " TOP OF COLLAR	2	889-A-37	—	✓ 53-B-209	(4) —	—	—	—
	35	" "								
	36	" "								
	37									
	38									
	39									
	40									
	41									
	42									
	43	Steps—Front	(7) 2	532-A-3	—	—	53-154 (1)	—	—	—
	44	Front Step Hanger								
	45	" " Brace								
	46	Steps—Back	(7) 1-R 1-L	863A68	OAK					
	47	Back Step Hanger	(7) 4	"		✓ 53C48				
	48	" " ~~Brace~~	(7) 2	"		1/2" x 2" x 23"				
	49	Tank Step								
	50	" "								
10	51	Tank Ladder—Outside	(8) 1	532-A-414	✓ —	532-A-414	(4) —	—	—	—
	52	" " —Inside								
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 54—HEADLIGHTS AND SIGNAL ATTACHMENTS								
	1	Signal Fixtures—Location								
	2	Flag Socket								
	3	Marker Bracket								
17	4	Lamp Bracket	⊗ 2	542-A-272	—	—	—	—	—	E.M.469 ⊗
	5	" Hook								
	6	Pail Hook								
	7	Headlight Bracket								
	8	" Shelf	1	889A37	PLATE and	54A20				
	9									
	10	License Plate								
	11	Ownership Plate								
	12	Patent "								
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21	**GROUP 57—LAGGING AND JACKET**								
	22	Steam Pipe Lagging								
	23	" " "								
	24	" " Jacket								
	25									
	26									
	27									
	28									
	29									
	30									
	31									
	32									
	33	**GROUP 59—OIL AND GREASE CUPS**								
	34	Truck Oil Cup								
	35	" " " Cap								
	36									
	37	Stoker Oil Cup								
	38	" " " Cap								
	39									
	40									
	41									
	42									
	43									
	44									
	45									
	46									
	47									
	48									
	49	**GROUP 61—PA'TING, LET'RING & NUM'G**								
	50	Tender Lettering								
	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 62—PILOT AND SNOW PLOW								
	1	Pilot	—							
	2	" Band	—							
	3	" Brace	—							
	4	" "	—							
	5	" Bottom Plate	—							
	6	" Bracket	—							
	7	" Corner Iron	—							
	8	" Knee	—							
	9									
	10									
	11									
	12									
	13	Snow Plow	—							
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21	**GROUP 63—PIPE FITTINGS AND CLAMPS**								
	22	Box Cooler Hose								
	23	" " Fitting								
	24	" " " Nut								
	25	" " " Swivel								
	26									
	27									
	28	Pipe Clamp 3/4"	2	648A31		✓	63A6			
	29	" " 1 1/4	4	"			63H63			
	30	" "								
	31	" "								
	32	" Hanger	3	648A31			63T28			
	33	" "	1	"			63C28			
	34	" "								
	35	" "								
	36	" Manifold Air Brake								
	37	" "								
	38	" " Support (1)	1	642A13	RIGHT ONLY 1/2" x 3" x 5" x 21" ANGLE					
	39	" " "								
	40									
	41	Water Joint Support								
	42									
	43									
	44									
	45									
	46									
	47									
	48									
	49									
	50	**GROUP 64—PIPING ARRANGEMENTS**								
	51	Piping Arrangement		648A31						
	52									
	53	Sprinkler Piping								
	54									
	55	Steam Heat Piping								
	56									
	57	Coal Pusher Piping								
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 66—PLUGS, HANDHOLES AND WASHOUTS								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9	**GROUP 71—RUN'G BOARDS & BRACK'TS**								
	10	Running Board								
	11	" "								
	12	" " Bracket								
	13	" " "								
	14	" " "								
	15	" " "								
	16									
	17									
	18									
	19									
	20									
	21	**GROUP 73—SAND BOX AND RIGGING**								
	22	Sand Box	—							
	23	" " Brace	—							
	24	" " Handle	—							
	25									
	26									
	27									
	28									
	29	**GROUP 76—SPRINGS**								
	30	Truck Spring COMPLETE ⓐ	4	To Sou. Ry Prints #11-E-12 Line 16 Print S.L 40223 Fur. By R R.						—
	31	" "	—							
	32	" " Clip	—							
	33	" " End Block	—							
	34	Buffer Spring	—							
	35	Coupler Spring	—							
	36	Draw Spring	—							
	37	" "	—							
	38	Water Scoop Spring	—							
	39	" " "	—							
	40	Brake Beam Leveling Spring	—							
	41									
	42									
	43									
	44									
	45									
	46	**GROUP 80—STOKER AND DETAILS**								
	47									
	48									
	49									
	50									
	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									
		(Group 80 Continued)								

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 80—STOKER AND DETAILS (Cont.)								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21									
	22									
	23									
	24									
	25									
	26									
	27									
	28									
	29									
	30									
	31									
	32									
	33									
	34									
	35									
	36									
	37									
	38									
	39									
	40									
	41									
	42									
	43									
	44	**GROUP 82—TANK VALVES AND COCKS**								
1✓	45	Tank Valve	2	824-A-1	—	—	—	—	82-184②	—
	46	" " Body	—							
1✓	47	" " Seat	2	824-A-1	—	—	—	—	—	EM.409②
1✓	48	" " ~~Shaft~~ RING	2	"	—	—	—	—	82-180②	—
	49	" "	—							
1✓	50	" " Rod	2	822-K-58	—	822-K-58①	—	—	—	—
	51	" " Lift	—							
1✓	52	" " Handle	2	824-A-1	—	—	—	—	—	E.M.406②
1✓	53	" " Gland	2	"	—	—	—	—	82-176②	—
1✓	54	" " Goose Neck	2	"	—	—	—	—	—	E.M.408②
10	55	" " ~~Nut~~ HANDLE STOP	4	"	TURNED FROM $\frac{7}{8}$" BAR IRON			—	—	—
	56	" " Sleeve	—							
1✓	57	" " Hose Nut	2	824-A-1	—	—	—	—	—	EM.407②
	58	" " " Swivel	—							
1✓	59	Tank Valve Flange	2	824-A-1	—	—	82-178①	—	—	—
1✓	60	" " "	2	"	—	—	82-181①	—	—	—
✓	61	" " Strainer	2	"	#18. B.W.G SHEET COPPER CRD. PUNCHED TO CD 822-A-6					

(Group 82 Continued)

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 82—TANK VAL. AND COCKS (Cont.)								
✓	1	Tank Well	Ø 2	824-A-1	3/8" PLATE ORD	—	—	—	—	—
✓	2	" " Plug	Ø 4	"	—	—	—	—	STICK	—
✓	3	" ~~Syphon~~ GASKETS	Ø 1-SET	"	MATL. ORD	—	—	—	—	—
	4	" " Pipe Support								
	5	" " Brace								
	6									
	7									
	8									
	9	Oil Tank Plug	—							
	10	" " Valve	—							
	11	" " " Seat	—							
	12	" " " Rod	—							
	13	" " " Arm	—							
	14	" " " Gland	—							
	15	" " "	—							
	16	" " " Nut	—							
	17	" " " Sleeve	—							
	18	" " " Drain	—							
	19	" " " " Seat	—							
	20	" " " Stuffing Box	—							
	21	" " " " " Nut	—							
	22	" " " " " Gland	—							
	23	" " " Rod End	—							
	24	" " Measuring Rod	—							
	25	Oil Tank Cock	—							
	26	" " " Cap	—							
	27	" " " Plug	—							
	28	" " " Nut	—							
	29	" " " Washer	—							
	30	" " " Handle	—							
✓	31	Tank Cock BODY	Ø 1	D-47025 LINE 3	—	—	—	—	82-338A	—
✓	32	" " Plug	Ø 1	"	—	—	—	—	82-337	—
✓	33	" " Nut	Ø 1	"	—	—	—	—	82-335	—
✓	34	" " ~~Washer~~ GLAND	Ø 1	"	—	—	—	—	82-336	—
✓	35	" " Handle	Ø 1	"	—	—	—	—	82-340	E.M.114
✓	36	" " ~~Flange~~ STUFFING BOX	Ø 1	"	—	—	—	—	—	E.M.234
✓	37	" " Rod	Ø 1	"	—	470-S-491 (4)	—	—	—	—
	38	" " ~~Stuffing Box~~ GASKETS	0 1-SET	"	RUBBER	—	—	—	—	—
✓	39	" " NUT ~~Gland~~	Ø 1	"	—	—	—	—	82-341	—
	40	" " " " Nut								
	41	Box Cooler Valve	—							
	42	" " " Cap	—							
	43	" " " Stem	—							
	44	" " " Gland	—							
	45	" " " Nut	—							
	46	" " " Handle	—							
	47	" " " Coupling Nut	—							
	48	" " " Swivel	—							
	49									
	50	**GROUP 84—TENDER BRAKE**								
	51	Frame Body Brake Arrangement (1)		843A23						
	52	Body Brake Lever (1)	2	"		84A8				
	53	" " "								
	54	" " " Support (1)	3	843A23		84A4				
	55	" " " "								
	56	" " Connecting Rod (1)	R-1 L-1	843A23		84A5				
	57	" " " "								
	58	" " Equalizer								
	59	" " Fulcrum								
	60	" " Rod CYL. (1)	1	843A23		84A6				
	61	" " Clevis								

(Group 84 Continued)

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 84—TENDER BRAKE (Cont.)								
	1	Body Brake Sheave	—							
	2	" " " Support	—							
	3	" " Shaft	—							
	4	" " " Cap	—							
	5	" " " Hanger	—							
	6	" " " Step	—							
	7	" " " Wheel	—							
	8	" " " Handle	—							
	9	" " " Pawl	—							
	10	" " " " Plate	—							
	11	" " " Ratchet	—							
	12	" " " Weight	—							
	13	" " Cylinder (7)	1	843A23	14" x 12"					
	14	" " " Head	—							
	15	" " " "	—							
	16	" " " Support	—							
10	17	" " Pins (7)	1-SET	843A23						
	18	" " "								
	19	" " "								
	20	" " "								
	21	Tender Brake Piston	—							
	22	" " " Follower	—							
	23	" " " Ring	—							
	24	" " " Rod (7)	1	842-K-36	—	842-K-36 (4)	—	—	—	—
	25	Brake Reservoir Hanger	—							
	26	" " Strap	—							
	27	Hand Brake Arrangement	—							
	28	" " Rod	—							
	29									
	30									
	31									
	32									
	33									
	34									
	35	Truck Brake (7)		894J1	—	—	—	—	—	—
	36	" " Beam (7) R L 2 2		"	CRECO 28000# 6530.C ORD.			—	—	—
	37	" " SUSPENSION SPRING (7)	4	843-F-3	CHIC. RY. EQUIPT. PRINT 6579 I ORD.			—	—	—
	38	" " " " (7) " ANGLE	2	"	—	84-A-101 (4)	—	—	—	—
	39	" " " Support (7)	8	842-A-2	—	842-A-2 (4)	—	—	—	—
	40	" " " ~~Safety Chain~~ "	—							
	41	" " " " Bar	—							
	42	" " " Leveling Eyebolt	—							
	43	" " Head	—							
	44	" " Shoe (7)	8	SOU. RY SPECIAL A.B.S + FDRY Co. ORD.			—	—	—	—
	45	" " " Key (7)	8	—	—	—	—	—	—	—
	46	" "	—							
	47	" " Lever (7)	2	842-B-3	—	84-A-7 (4)	—	—	—	—
	48	" " " Guide	—							
	49	" " Dead Lever (7)	2	842-B-3	—	84-A-7 (4)	—	—	—	—
	50	" " " " Anchor (7)	2	842-A-58	—	842-A-58 (4)	—	—	—	—
	51	" " " " " Lug (7) R L 1 1		842-A-1	—	—	—	84-7 84-8 —	—	E.M. 412 E.M 413
	52	" " Lever Rod (7)	2	842-B-3	SCHAEFER EQUIPT. Co ORD.			—	—	—
	53	" " " "	—							
	54	" " Pins (7)	8	894-J-1	—	84-A-42 (4)	—	—	—	—
Walter 10	55	" " " (7)	1-SET	842-B-3	—	—	—	—	—	—
	56	" " "	—							
	57	THIRD POINT SUSPENSION ARRGT (7)		843-F-3	—	—	—	—	—	—
	58	" " SLIDING CHAIR (7)	4	"	CHIC. RY EQUIPT. Co Pt # 6579 I ORD.			—	—	—
	59	" " SPRING WASHERS (7)	4	"	½ x 3 x 5" PLATE		—	—	—	—
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 85—TENDER FRAME								
	1	Frame	1	858A27	COMMONWEALTH ORD		—	—	—	—
	2	" Center Sill								
	3	" Side Sill								
	4	" End Sill								
	5	" Corner Angle								
	6	" " Bracket								
	7	" " Knee								
	8	" Brace								
	9	" "								
	10	" "								
	11	" Filling								
	12	" "								
	13	"								
	14	" Bolster								
	15	" " Angle								
	16	" " Plate								
	17	" " Truss Bar								
	18	" " " Brace								
	19	" " " Plate								
	20	" "								
	21	" " Tie Plate								
	22	" Center Plate (1)	2	858A27	COMMONWEALTH. ORD		—	—	—	—
	23	" Side Bearing WEARING PLATE (1)	4	"	5"x12" THICKNESS TO PROVIDE 1/4" CLEARANCE F+B					
	24	" " "								
	25	Push Pole								
	26	" " Collars	2	852A42	Pole ord IN P. D.	852A42				
	27	" " Pocket								
	28	" " Support (1)	R-1 L-1	852A6	—	—	85-43 (1) 85-44 (1)	—	—	—
	29	" " Stop								
	30	Wrecking Frog Brackets (1)	4	858A27		85A47				
	31	Switch Rope Hooks								
	32	Check Chain								
	33	" " Pocket								
	34	" " Hook								
	35	Tender Floor (1)	1	858A27	1 3/4 x 12" GEORGIA PINE ORD.					
	36	" " Edge	1	"	1 3/4 x 2" " "					
	37	Bumper—Front								
	38	" —Back								
	39	Tender Floor Anchor								
	40									
	41									
	42									
	43									
	44									
	45									
	46									
	47	**GROUP 86—TENDER DRAWGEAR** (1)	1	863A68	MINER A-18-X-2 ORD		—	—	—	—
	48	Coupler (1)	1	"	GOULD COUPLER Co. PRINT # F.C.891 ORD		—	—	—	—
	49	" ~~Pocket~~ FOLLOWER BLOCK (1)	1	"	MALL. IRON T.H. SYMINGTON PRINT G-410 ORD.					
	50	" Followers (1)	1	"	SOFT STEEL T.H. SYMINGTON PRINT H-578B ORD.					
	51	" Yoke (1)	1	"	" " " " " H-577A ORD.					
	52	" " ~~Filler~~ CARRIER (1)	2	863A68	3"x2 1/2"x1/2" ANGLE CUT TO 3"x2 1/8"x1/2"					
	53	" Follower Guide								
	54	" Carry Iron (1)	1	863A68		1/2"x5"x29"				
	55	" Chain								
	56	" " Clevis								
10	57	Drawbar Pin (1)	1	862A2		862A2				
	58	" " SUPPORT (1)	1	372A10		372A10				
	59	Safety Chain Pin								
	60	Draft Gear ~~Check Casting~~ KEY COTTER (1)	2	863A68	TH Symington Print H 751-3 ord ~~Key~~					
	61	" " Key (1)	2	"	T.H. SYMINGTON PRINT ~~321HA ORD.~~ H 751 ORD					

(Group 86 Continued)

Check	Item	TITLE		No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 86—TENDER DRAWGEAR (Cont.)									
	1	Draft Gear Carrier	(T)	1	863A68		86B41				
	2	Drawhead ~~Brace~~ CLAMP	(T)	2	"		86A49				
	3	Uncoupling Shaft	(T)	1	"		86A102				
	4	" " ~~Arm~~ LOCK LIFTER	(T)	1	"	RY. DEVICES CO. PRINT #12-1940-ORD					
	5	" " Bracket	(T)	3	372A213			37-385			
	6	" " "									
	7	" " Handle									
	8	" " Cap									
	9										
	10	Draw Casting—Front									
	11	" " —Back									
	12	Safety Chain									
	13	" " Clevis									
	14	" " Staple									
	15	" " Washer									
	16										
	17	Chafing Casting									
	18	" Iron									
	19	Spring Buffer									
	20	" " Case									
	21										
	22										
	23										
	24										
	25										
	26										
	27										
	28										
	29										
	30										
	31										
	32										
	33										
	34	**GROUP 87—TENDER DECK AND TOOL BOX**									
	35	Tender Deck	(X)	1	872-A-32	WOOD & PLATE MATL ORD		—	—	—	—
	36	" " Shovel Plate		1	889-A-37	1/4" PLATE ORD		—	—	—	—
	37	" " Support, Outside	R L	1 1	872-A-32	1/4" PLATE		—	—	—	—
	38	" " " Inside	R L	1 1	"	1/4" "		—	—	—	—
	39										
	40										
	41	Tool Box	R L	1 1	872 A36	#10 PLATE					
	42	" "		2	"	6" Ex Heavy "T" ord					
	43	" " ~~Handle~~ Hasp		1	"	6" ord					
10	44	" " " eyebolt	(X)	~~1~~ 3	"		470-S-213				
	45	" " Brace									
	46	" " "									
	47	"									
	48	" Closet Hinge									
	49	" " " Lug									
	50										
	51										
	52										
	53	Water Cooler									
	54	" " Base									
	55	" " Top									
	56	" " Lid									
	57	" " Casing									
	58	" " Cock									
	59										
	60										
	61										

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 88—TENDER TANK								
	1	Tank—Water	1	889A37	8000 GALL	BEND ANGLES & TEES	—	—	—	
	2	" Material Bill 88M076								
	3	" Brace	—							
	4	" Knee	—							
	5	" Lifter Iron	—							
	6	" Drain Pipe ⊗	2	882FL	—	—	88-101 ⊗	—	—	—
	7	" " " ~~Flange~~ GASKETS	2	889A9	1/8" RUBBER	—	—	—	—	—
	8	" " " ~~4~~ "	2	889A10	1/8 "	—	—	—	—	—
	9	" Fuel Rack	—							
	10	" Tool Hook	—							
	11	" Lug	8	882-A-3	—	470-5-07 ④	—	—	—	—
	12	" "	—							
	13	" Funnel	1	882-A-6	1/4" PLATE ORD	—	—	—	—	—
	14	" " Lid	3	"	3/16" " ORD	—	—	—	—	—
	15	" " Hinge	6	"	—	470-5-447 ④	—	—	—	—
	16	" " " Lug ⊗	6	882-C-68	—	—	—	88-95 ⊗	—	—
	17	" " Handle	3	882-A-1	—	—	—	—	—	E.M 414 ⊗
	18	" " Screen	—							
	19	" Coal Gate ⊕	1	884-B-3	1½"×10"×54" OAK	—	—	—	—	—
	20	Coal Gate Angle	1	" "	2½×2½×3/8" ④	—	—	—	—	E.M 416 ⊗
	21	" " ~~Catch~~ POCKET	8	882-B-7	—	—	—	—	—	E.M 417 ⊗
	22	" " ~~Latch~~ "	2	"	—	—	—	—	—	—
	23	" " Hinge	—							
	24	" " " Lug	—							
10	25	" " Chain	3	882B8	COMPLETE 882-B-8	④	—	—	—	—
	26	" " Eyebolt	—							
	27	" " Slide Clamp	—							
	28	" " Catch Bracket	—							
	29	" " Handle	—							
	30									
	31	Tank Cut Out for Stoker	—							
	32									
	33									
	34	Tank—Oil	—							
	35	" Material Bill	—							
	36	" Brace	—							
	37	" Lifter Iron	—							
	38	" Lug	—							
	39	" "	—							
	40	" Funnel	—							
	41	" " Lid	—							
	42	" " Hinge	—							
	43	" " " Lug	—							
	44	" " Screw	—							
	45	" " Handle	—							
	46	" " Gasket	—							
	47	" " Screen	—							
	48									
	49									
	50	Coal Pusher	—							
	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									

(Group 86 Continued)

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 89—TENDER TRUCK								
	1	Truck (1)	2	894-J-1	6"x11" JOURNAL	—	—	—	—	→
	2	" Arch Bar	—							
	3	" Truss Bar	—							
	4	" Tie Bar (7)	8	894-J-1	—	3/4"x6"x21 3/4" (4)	—	—	—	—
	5	" Columns	—							
	6	" "	—							
	7	" Bolster (7)	2	893-A-2	BUCKEYE	STEEL CSTG. CO. ORD	—	—	—	—
	8	" " Guide	—							
	9	" " Bar	—							
	10	" " Cap	—							
	11	" " Truss Rod	—							
	12	" " " " Washer	—							
	13	" Center Plate (7)	2	892-A-1	—	—	—	89-18 (3)	—	—
	14	" King Bolt (7)	2	892-A-3	—	892-A-3 (4)	—	—	—	→
	15	" " " Keys (7)	2	892-A-61	—	892-A-61 (4)	—	—	—	→
	16	" Spring Plank (7)	2	892-C-2	3/8" PLATE ORD	—	—	—	—	→
	17	" " Seat—Top	—							
	18	" " " —Bottom (7)	8	894-J-1	1/4"x4"x16 1/2" PLATE	—	—	—	—	→
	19	" " Hanger	—							
	20	" " "	—							
	21	" " " Gib	—							
	22	" Side Bearing (1)	4	892-A-92	—	—	89-218 (1)	—	→	→
	23	" " " Block	—							
	24	" Frame (7)	4	894-J-1	ANDREWS. BUCKEYE STEEL CSTG. CO. ~~ORD~~ FUR. BY RR.					
	25	" " Brace	—							
	26	" " Crosstie	—							
	27	" Pedestal	—							
	28	" "	—							
	29	" " Cap	—							
	30	" " " Tie	—							
	31	" Equalizer	—							
	32	" "	—							
	33	" Swing Frame	—							
	34	" " Link	—							
	35	" " Pins	—							
	36	" Check Chain (7)	6	892D69	R. OF FRONT TRUCK FLR OF REAR "	892D69 (4)	—	—	—	—
	37	" " " ~~Rod~~ (7)	2	892-E-69	FRONT OF FRONT TRUCK	892E69 (4)	—	—	—	—
	38	" " " Clevis								
	39	" " " Pocket								
	40									
	41									
	42									
	43									
	44									
	45									
	46									
	47									
	48									
	49									
	50									
	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 90—TENDER WATER SCOOP								
	1	Water Scoop	—							
	2	Scoop Cylinder	—							
	3	" " Head	—							
	4	" " "	—							
	5	" " Gland	—							
	6	" " Support	—							
	7	" " "	—							
	8	" Piston	—							
	9	" " Follower	—							
	10	" " Rings	—							
	11	" " Rod	—							
	12	" " " Jaws	—							
	13	" " " Extension Links	—							
	14	" Inside Pipe	—							
	15	" Outside Pipe	—							
	16	" Air Pipe Casing	—							
	17	" Neck	—							
	18	" Splash Hood	—							
	19	" Dipper	—							
	20	" " Link	—							
	21	" " Lifter	—							
	22	" " Nose	—							
	23	" " Shield	—							
	24	" " " Brackets	—							
	25	" Shaft	—							
	26	" " Fulcrum	—							
	27	" Bell Crank	—							
	28	" Arm	—							
	29	" Spring Cap	—							
	30	" " Rod	—							
	31	" " Seat	—							
	32	" " " Support	—							
	33	" Jaws	—							
	34	" Rods	—							
	35	" Lever	—							
	36	" Link	—							
	37	" Bracket	—							
	38	" Brace	—							
	39	" Pipe Hanger	—							
	40	" Joint Piece	—							
	41	" " " Trunion Cap	—							
	42	" " " " "	—							
	43	" " " Lifting Links	—							
	44	" " " " "	—							
	45	" Delivery Pipe Hanger	—							
	46	" " " " Clamp	—							
	47	" " " " Clips	—							
	48	"								
	49	"								
	50	" Operating Valve	—							
	51	" " " Cap	—							
	52	" " " Plug	—							
	53	" " " Nut	—							
	54	" " " Handle	—							
	55	" " " Quadrant	—							
	56	" " " Spring	—							
	57									
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 95—WHEELS AND TIRES								
	1	Truck Wheel 33" (1)	8		850# A.R.A CHILLED CAST IRON		ORD.—	—	—	—
	2	Wheel Pressed on Axle (Tons) (1)			50 TONS MIN 70 TONS. MAX		—	—	—	—
	3	Wheel Center	—							
	4	" Tire	—							
	5	Tire Retaining Ring	—							
	6	Wheel Numbers								
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21									
	22									
	23									
	24									
	25									
	26	**GROUP 99—MISCELLANEOUS**								
	27									
	28									
	29									
	30									
	31									
	32									
	33									
	34									
	35									
	36									
	37									
	38									
	39									
	40									
	41									
	42									
	43									
	44									
	45									
	46									
	47									
	48									
	49									
	50									
	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING		FORGINGS	CASTINGS—PATTERN NUMBERS			
				Card No.	Construct'n Notes	Sketch No.	Cast Iron	Cast Steel	Brass	Mal. Iron

16

Iron

Material Specifications

Property of
Pt Place Toro YMCA Toledo Ohio